1 Interview Summaries

1.1 Island Institute

Interview Type	Personal, Private, Non-profit
Interview Location	Island Institute
Interview Date	October 23, 2001
Summary Date	November 7, 2001
Interviewer	CDM / Michelle Thaler (thalerma@cdm.com)
Interviewed:	*Chris Brehme, GIS and Website Program Director (cbrehme@islandinstitute.org) 386 Maine Street Rockland, ME 04841-0648 207-594-9209 Nathan Michaud, Program Officer for Community Planning, (nmichaud@islandinstitute.org)
Staff Size (approx)	3 full time GIS staff including a GIS Manager and a GIS analyst, trying to get funding for another GIS analyst, 2 GIS interns
Budget (approx)	$50,000-100,000 GIS budget,
URL:	http://www.islandinstitute.org

1.1.1 Overview

The Island Institute is a private, non-profit organization providing support services to year-round island communities off the coast of Maine as well as several coastal communities. Services are focused on advocating development that does not compromise Island environments and coastal resources and providing support services to communities in the Gulf of Maine.

1.1.2 GIS Initiatives

1.1.2.1 Overview of GIS Utilization

The Island Institute uses GIS for collection and analysis of scientific data. GIS is also viewed as a medium to exchange data. This data is used to foster public participation and dialog among island community members. GIS is seen as a tool for analysis and information dissemination. A project funded by the National Science Foundation focused on community integrated GIS. This project, in Isleboro, brings together a land trust, schools and the municipality with the use of GIS technology that is science focused. The Island Institute also produces lots of hard-copy maps for internal use and for island communities.

1.1.2.2 GIS Operating Environment and Infrastructure

- 2 ArcInfo 8.1 workstation licenses running on a Windows NT platform
- 3 ArcView 3.2 licenses
- ArcIMS
- The Island Institute has the following hardware:
    - HP455 CA plotter
    - 2 Trimble Geo Explorer II units

- 1 laptop running windows NT suitable for work in the field
- 2 Desktops running Windows NT
- 1 Map Server for use with ArcIMS

1.1.2.3 GIS Data Resources and Requirements

1.1.2.3.1 Spatial Data

The spatial data is projected to UTM NAD83 meters.

Existing data sets include:
Basemap features: none

Analysis layers include:
Sampling data (project to link attribute data to locations)
NOAA National Geophysical datasets – includes geo tiffs with images at low tide
Contours
Bathymetric data
Data from Main DEP – (which took OGIS data and created seamless coverages)
Coastline from USGS – not updated
Hydro from USGS– not updated
Roads – not updated
Digital Bathometric charts from Maine Department of Marine Resources (DMR)
DRGs
Some parcel layers for island communities

Maps and Data from the National Marine Fisheries Service (US)-showing species of groundfish and their habitats (maps are available on-line)

Maps and Data from the Department of Fisheries and Oceans (Canada)-showing species of groundfish and their habitats (maps are available on-line)

There is a GIS database development project on Peaks Island done in conjunction with the City of Portland.

Currently unavailable but desired data sets include:
Sea floor geology
Orthophotos
Zoning
Good parcel data for communities – just boundary data
Official street maps
Updated E911 data
Data from commercial fisherman
Sea sampling

1.1.2.3.2 Attribute Data

The Penobscot Bay Marine Resources Collaborative project is funded by NOAA to collect scientific data, including remotely sensed data and to create a database for use in

addressing issues such as habitat protection, pollution management, and aquaculture siting. The database created is on the OGIS web site. The data collected was put into GIS-ready format for use in many analyses projects.

1.1.2.3.3 Data Issues

The Island Institute wants seamless coverages because their analysis areas often cross tile boundaries. Since the OGIS data is tiled, the data is cumbersome to use. The DEP has taken some of the OGIS data and created seamless coverages which the Island Institute uses.

Data exchange and dissemination is difficult with Island communities due to technology limitations. Many island communities do not have the hardware and software required to store and analyze GIS data sets. Also, Internet access does not exist on some island. Where it does exits it may not be sufficient to support the download of large files.

1.1.2.4 GIS Applications and Application Requirements

The Island Institute serves the Gulf of Maine e-atlas. This is on a dedicated map server.

Planned future GIS activity and applications:

- Use GIS for public education on marine ecology
- Build out scenarios
- "Visionining" with 3D simulations of zoning changes
- Links to other sites for GIS information

1.1.3 Other Relevant Issues

- Would like to see the state host the yahoo e-mail list which currently discusses GIS issues – OGIS could monitor the discussions and comment where appropriate

- Would like to see a larger emphasis on Metadata

1.1.4 Major Benefits and Cost Justification

The Island Institute is a resource for Island and coastal communities for planning and conservation data. GIS plays a large role in the analysis of this data as well as data dissemination. There is a focus on the integration of scientific data with the GIS to enable the public to make informed decisions about issues that impact life on the islands and the water in the Gulf of Maine.

The state and OGIS could serve a much needed educational role in teaching the public what GIS is and how it can be used. OGIS could also host a dialog for exchange of ideas for communities that are involved in using GIS technology and data. Additionally, state negotiated purchasing contracts would lower the cost of hardware and software and allow some island communities to acquire the needed tools to use GIS data.